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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/534,282	03/24/2000	Selda Gunscl	42053.6USPT	2884

24238 7590 03/17/2003

JENKENS & GILCHRIST, A PROFESSIONAL CORPORATION  
1100 LOUISIANA  
SUITE 1800  
HOUSTON, TX 77002-5214

EXAMINER

BERNATZ, KEVIN M

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 03/17/2003

19

Please find below and/or attached an Office communication concerning this application or proceeding.



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# Office Action Summary

Application No.

09/534,282

Applicant(s)

GUNSEL ET AL.

Examiner

Kevin M Bernatz

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1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,11-14 and 23-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,11-14 and 23-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. Amendments to claims 1, 2, 11, 12, 14, 23 – 26, 29, 30, 33 and 35 - 37, filed on October 16, 2002, have been entered in the above-identified application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Request for Continued Examination***

3. The Request for Continued Examination (RCE) under 37 CFR 1.53 (d) filed on October 16, 2002 is acceptable and a RCE has been established. An action on the RCE follows.

### ***Claim Objections***

4. The clean copy and copy showing changes of claim 25 do not agree. Specifically, it appears that claim 25 was intended to include the limitation "and wherein the hydrocarbyl-substituted cyclopentane comprises at least 29 carbon atoms", but the clean version of the claims do not include this limitation.

### ***Double Patenting***

5. Applicant is advised that should claim 13<sup>/1</sup> be found allowable, claim 14<sup>/13</sup> will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two

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claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). In the instant case, the structure in claim 14 is already present in claim 1.

***Claim Rejections - 35 USC § 112***

6. Claims 33 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terms "higher aliphatic alcohols" "higher aliphatic amines", "inorganic fine powders" and "resin fine powders" in claims 33 and 35 are relative terms which renders the claims indefinite. The terms "higher" and "fine" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For purposes of evaluating the prior art, the examiner has interpreted these claims as simply reading "aliphatic alcohols", "aliphatic amines", "inorganic powders" and "resin powders".

***Claim Rejections - 35 USC § 103***

7. Claims 1, 11 – 14 and 23 – 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stirniman et al. (U.S. Patent No. 6,319,600 B1) in view of Venier et

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al. ('023), Venier, Casserly and Gonsel (IDS reference titled "Tris (2-Octyldodecyl) Cyclopentane, a Low Volatility, Wide Liquid-range, Hydrocarbon Fluid") and Babb et al. ('547) (this combination of references will hereafter be referred to as SVVB et al.).

Regarding claims 1, 11 – 14 and 23 - 35, SVVB et al. are relied upon for the reasons of record as set forth in Paragraph No. 4 of the Office Action mailed on February 7, 2002 (Paper No. 12).

Regarding the amended limitation that "the hydrocarbyl-substituted cyclopentane comprises at least 29 carbon atoms", the examiner notes that Venier et al. ('023) teach embodiments meeting the claimed limitation (col. 11, lines 30 – 59), where Venier, Casserly, and Gonsel demonstrate a specific preferred embodiment having 65 carbon atoms (Page 13 1-1, last sentence of 2<sup>nd</sup> column).

It would therefore have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device of SVVB et al. to use hydrocarbyl-substituted cyclopentanes meeting applicants' claimed limitations as taught by Venier et al. ('023) and Venier, Casserly and Gonsel since such embodiments are preferred embodiments of the disclosed Venier et al. ('023) cyclopentane lubricants.

8. Claims 11 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over SVVB as applied above, and further in view of Patsidis et al. ('351) for the reasons of record as set forth in Paragraph No. 5 of the Office Action mailed on February 7, 2002 (Paper No. 12).

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9. Claims 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over SVVB as applied above, and further in view of Venier and Casserly (IDS reference from Symposium on the Chem. of Lubricants, Boston Meeting, pre-print, 35(2), 1990) for the reasons of record as set forth in Paragraph No. 6 of the Office Action mailed on February 7, 2002 (Paper No. 12).

10. Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over SVVB as applied above, and further in view of Sanechika et al. ('593) and Ng ('216) for the reasons of record as set forth in Paragraph No. 7 of the Office Action mailed on February 7, 2002 (Paper No. 12).

11. Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over SVVB as applied above, and further in view of Tsuchiya et al. ('516) and Hayushi ('983) for the reasons of record as set forth in Paragraph No. 8 of the Office Action mailed on February 7, 2002 (Paper No. 12).

### ***Response to Arguments***

**12. The rejection of claims 1, 11 – 14 and 23 - 37 under 35 U.S.C § 103(a) – Stirniman et al. in view of Venier et al., and other references**

Applicant(s) argue(s) that the present disclosure is sufficient to demonstrate an unexpected improvement when using the claimed invention over the perfluoropolyether lubricants of the prior art. The examiner respectfully disagrees.

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First, the examiner acknowledges that applicants have narrowed the claims to the species disclosed in the Examples provided by applicants (i.e. a hydrocarbyl substituted cyclopentane). The examiner also acknowledges that the carbon number will correlate with the molecular weight, which correlates with the viscosity. However, applicants claims are not commensurate in scope with the showing of unexpected results (see Table below).

	Weight % film	Carbon Number	Molecular Weight
Minimum Claimed	---	29	---
ZDOL shown	0.1	???	???
Penzane X-2000	0.11	65	910
Maximum Claimed	---	Infinity	---

As can be seen from above, applicants' are claiming a range in carbon atoms of 29+. Applicants' have one substituted cyclopentane example within that entire range, but it is unclear what type of ZDOL that example was compared to? What was the MW or Carbon number of the ZDOL?

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In order to provide a showing commensurate in scope with the claimed range, the examiner would require the following evidence:

	Weight % film	Carbon Number	Molecular Weight
ZDOL sample 1	~0.1	See MW	~ = 850 – 950
Penzane X-2000*	0.11	65	910
Penzane sample 2	~0.1	~29	Penzane #2 MW
ZDOL sample 2	~0.1	See MW	~ = Penzane #2 MW

\* This sample is already shown in applicants' disclosure.

The weight percents for the film do not have to be 0.1, but all examples should be made from the same weight percent. The examiner deems that the above experiments would be sufficient to demonstrate the showing of unexpected results for the species of hydrocarbyl-substituted cyclopentanes possessing at least 29 carbon atoms.

### **Conclusion**

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. KYOD (JP 10 – 140169-A) teach using a Penzane X-2000 lubricant instead of a perfluoro ether lubricant since the X-2000 is superior in lubricity and high temperature/low vacuum performance. However KYOD makes no mention of using Penzane X-2000 as a lubricant for a magnetic recording medium (see Machine Translation).

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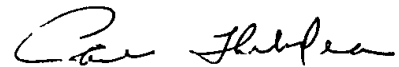
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M Bernatz whose telephone number is (703) 308-1737. The examiner can normally be reached on M-F, 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (703) 308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.



KMB  
December 9, 2002



Paul Thibodeau  
Supervisory Patent Examiner  
Technology Center 1700